

## Abstract

The high-pressure pump has at least one pump element (32), which has a pump piston (34) that defines a pump work chamber (38) and that is driven at least indirectly by a drive shaft (12) in a reciprocating motion, counter to the force of a restoring spring (68). The pump piston (34) is braced on the drive shaft (12) at least indirectly via a sleevelike tappet (60), and the restoring spring (68) engages at least the pump piston (34). A support element (50) is inserted into the tappet (60), on which support element the pump piston (34) is braced toward the drive shaft (12) and which is braced at least indirectly on the drive shaft (12). The restoring spring (68), via a spring plate (66), engages the pump piston (34) and the tappet (60). The spring plate (66) is elastically deformable in the direction of motion of the pump piston (34) in such a way that as a result of its elastic deformation, deviations in the position of its contact faces (56; 64) on the pump piston (34) and on the tappet (60) are compensated for.